INTERNATIONAL SEARCH REPORT

International application No. PCT/US03/01027

A. CLAS IPC(7) US CL	SSIFICATION OF SUBJECT MATTER : C12M 3/00; C12Q 1/02 : 435/29,287.3			
According to	International Patent Classification (IPC) or to both nat	tional class	sification and IPC	
B. FIEL	DS SEARCHED			
Minimum do U.S. : 4	cumentation searched (classification system followed b 35/29, 286.4, 286.5, 287.3, 288.5, 288.7, 287.2: 422/	y classific 68.1,102;	ation symbols) 359/398	
Documentation	on searched other than minimum documentation to the	extent tha	t such documents are included in	the fields searched
Electronic da	ata base consulted during the international search (name	e of data b	ase and, where practicable, sear	rch terms used)
C. DOC	UMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where a			Relevant to claim No.
Y,P	US 2002/0076689 A1 (FARB et al.) 20 June 2002 (2	20.06.2002	2), see entire document.	1-170
Y,P	US 6,470,226 B1 (OLESEN et al.) 22 October 2002 (22.10.2002), see entire document.			1-170
Y	US 6,193,647 B1 (BEEBE et al.) 27 February 2001 (27.02.2001), see entire document.			1-170
A	US 5,449,492 A (KRISHTAL) 12 September 1995 (12.09.1995), see entire document.			I-170
A	US 2001/0029320 A (TRUMBULL et al.) 11 Octobe document.	er 2001 (1	1.10.2001), see entire	1-170
				L
	r documents are listed in the continuation of Box C.		See patent family annex.	
"A* documer	Special categories of cited documents: document defining the general state of the art which is that considered to be of particular relevance		considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other use focuments, such combination	
"E" earlier application or patent published on or after the international filling date		"X"		
establish specified				
	n referring to an oral disclosure, use, exhibition or other means		being obvious to a person skilled in the	
"P" documen	n published prior to the international filing date but later than the	"&"	document member of the same patent	tamity

Date of mailing of the international search report

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28 MAY 2003 Authorized officer

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08 May 2003 (08.05.2003) Name and mailing address of the ISA/US

Mail Stop PCT, Alln: ISA/US

Date of the actual completion of the international search